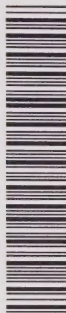


Gov. Doc.
Can.
Ag

Canada Agric. Dept.

BOVINE TUBERCULOSIS

QUESTIONS AND ANSWERS



3 1761 12000511 1



DOMINION OF CANADA
DEPARTMENT OF AGRICULTURE
PAMPHLET No. 16—NEW SERIES

HEALTH OF ANIMALS BRANCH

FREDERICK TORRANCE, B.A., D.V.S., Veterinary Director General.

Published by direction of the Hon. W. R. MOTHERWELL, Minister of Agriculture,
Ottawa, July, 1922.

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1922

BOVINE TUBERCULOSIS

Q. I want to know about testing my cattle for tuberculosis. Do I have to test them?

A. Not unless you wish to do so. There is no Federal law compelling any owner of cattle to have them tested.

Q. But I can get help if I want to test?

A. Certainly! You have how many cattle, pure-breds and grades?

Fifteen pure-breds and nine grades.

Have you a pure-bred herd bull?

Yes.

Then you can come in under the Accredited Herd Plan.

Q. What is the minimum of animals that will be accepted?

A. Ten pure-bred animals, one a pure-bred herd sire.

Q. Why is that?

A. Well, when our inspectors are on a farm actually testing, the number of cattle within reasonable limits does not matter very much. It does not take very much longer to test forty cows than it does to test fifteen. But the travelling to and from your farm takes as long in either case. So the limit of ten was fixed to be fair to most farmers all over Canada.

Q. And why the bull? Cannot I borrow a bull or pay for service?

A. The idea of that is partly that it is an evidence of a farmer's good faith. It shows that he means to breed up from grades to pure-breds. It promises the Department of Agriculture that it will have worthwhile stock to work on. Also, it removes the necessity for contact between herds. A herd cannot be freed from tuberculosis if the animals are running around with untested cattle.

Q. That seems reasonable. Now, what good will it do me to start on the accreditation of my herd?

A. Plenty. First, it is an acknowledgement that you are an intelligently progressive farmer, and that you will pay something, if necessary, to have your cattle healthy, and their milk, butter, and cheese safe for your own children, or any one else's to thrive on. That's good advertising to start with, and the Department of Agriculture advertises your herd for you, and, through it, you yourself as the kind of farmer and citizen every country wants.

Q. How does it do that?

A. It issues lists of accredited herds, which are available to buyers in Canada and the United States. It is only natural that those buyers will want clean stock, and under an accredited herd

Minimum
number.

Benefit to owner.

certificate you can export cattle from your herd to the United States without the trouble and uncertainty of special tests for export. Then another advantage is that a percentage of cases of sterility is caused by tuberculosis. Get rid of tuberculosis, and you lessen the number of sterility cases.

Q. That is worth while. Just now you said, "pay something to have your cattle healthy." How much will it cost?

Cost to owner.

A. The services of the inspectors, who are all specially trained men, are free to you. You pay nothing for the material they use in their work. If your herd is clean, it will cost you nothing except enough gas to take the Henry to the station when the inspector comes to make a test. If your herd is diseased, you can slaughter the diseased ones if you wish. Or, you can put them on other premises in isolation and keep them there. For the slaughtered cattle the Government pays a liberal amount of compensation.

Q. How much? and how is the figure arrived at?

Compensation.

A. The inspector makes a valuation of the animals to be slaughtered. This is, as nearly as he can estimate, the exact market value. But he can only value pure-bred cattle up to two hundred dollars (\$200), and grades up to sixty dollars (\$60). Then the Government pays two-thirds ($\frac{2}{3}$) of his valuation.

Q. Why not more?

A. Well, the Government is not spending its own money. It is spending yours. And it never undertakes to buy tuberculous cattle. It promises to help; two-thirds from the Government and one-third from you looks like a fair split. Then if the carcass of an animal that reacts to the test is not condemned, you are allowed to sell it for beef. The money from that sale is yours, and it makes no difference to the compensation.

Q. All right, what about the other system? When diseased cattle are not slaughtered?

A. That is called the Bang system. It is based on the fact that the calf of a tuberculous cow is not necessarily diseased, and the system allows many calves from valuable reactors to be raised.

Q. How is it worked?

Bang System.

A. The animals of the Bang herd are kept on separate premises from the main herd. There should be a good distance between the two herds, the greater the better within reason. The Bang herd animals should have separate attendants, separate food and water supply, and separate equipment, and all communication and traffic between their quarters and the healthy herd should be strictly prevented. Immediately after birth the calves from the Bang cows should be removed to other distinct premises, or, if that is impossible, to isolated quarters on the healthy herd farm. They stay there until they have been tested twice. If they pass both tests, they can go into the healthy herd.

Q. Now about the testing of my herd? How do I start at it?

A. You write to the Veterinary Director General, Ottawa, and in reply you will receive an application form, and the regulations. They give you the main conditions which you agree to accept.

Q. Who applies the test?

A. The test will be applied by a regular salaried inspector of the Health of Animals Branch.

Q. What do I do next?

A. Send the application form back to the Veterinary Director General properly filled in, signed, and witnessed. When he gets that your name goes on the list.

Q. How long do I have to wait until they begin testing?

A. It depends upon how many people are on the list before you. Ordinarily though, you would not have to wait more than two months.

Q. Then the inspector comes and tests my cattle?

Sanitation of
premises.

A. Not until he has had a look around the farm. He will want to see that the buildings are clean and well enough built so that they can be kept sanitary. And he will want to see where the manure pile is, and where the drainage from it goes to. He will want to know that your place is in good clean condition. Then if he is satisfied as to that he will begin the test.

Q. Supposing all the cattle pass this test?

Two clean tests
in herd without
reactors at any
stage.

A. Then they will be tested again one year from that date, and if they pass that second test, you will receive your accredited herd certificate.

Q. What happens if they do not pass?

A. The reactors will have a T mark punched in one ear and will be slaughtered, or removed to a Bang herd, such as I told you of just now, if you wish to start one.

Q. How will I know if the carcasses of the slaughtered ones are fit to eat?

Carcasses licensed
for food.

A. The inspector will be there when they are killed, and will examine the carcasses. If they can be used for food he will give you a certificate saying so.

Q. Supposing I cannot arrange to slaughter them at home?

A. Then the inspector will give you a license to ship them to an abattoir, or slaughter-house.

Q. What about pregnant cows?

A. They may be isolated under written quarantine order, issued by the inspector, and kept until the calf is born, up to two months.

Q. After these diseased cattle have been found, what happens?

A. You should clean up and disinfect your premises quickly, because the inspector can not send in your compensation papers until he can certify that this has been done.

Q. When will the next test be made?

Retest

A. Sixty days later. If they all pass that test six months from then the cattle will be tested again, and following that in six months' time. And that happens whenever reactors are found. When once diseased cattle have been found in a herd, the herd must pass three successive clean tests at six months intervals before an accredited herd certificate can be issued.

Q. Do animals never give a doubtful result to the test?

Suspects.

A. Yes! these are called "suspects" and are isolated under written quarantine order for sixty days. Then they are retested. If they pass as clean, then they can go back into the herd. If not, they can be slaughtered and compensation is paid, or they can go to the Bang herd.

Q. Does it ever happen that when cattle have been slaughtered as being diseased nothing can be found indicating disease when the carcase is examined?

A. Yes! that happens sometimes. But that does not mean that the animal was not tubercular. The disease may be present in a stage at which no portion is visibly affected.

"Natural increase."

Q. What happens to calves born after a test has been made?

A. They remain with the herd and are tested with it at the next test. If the herd is fully accredited, they are covered by the herd certificate as long as it remains in force.

Q. How long is that?

A. One year from date of issue. Then the herd is tested again. If there are still no diseased cattle in it, the certificate is extended for another year.

Additions by purchase.

Q. Supposing I want to buy more cattle to add to my herd?

A. When you have selected the cattle you intend buying you should notify the Veterinary Inspector in your district. An inspector will then go and test the cattle on the premises of the man from whom you are buying them. If they react at this test, they will be earmarked, and no compensation will be paid.

Q. Why not?

A. Because the department is dealing with you as owner of a herd undergoing accreditation, and not with the seller. As the animals have not been admitted into your herd, you are not entitled to compensation.

Q. If they pass that test, what next?

A. They are taken at once to your farm and isolated there under written quarantine from the inspector for sixty days. Then they are retested. If they pass, they go into the main herd. If they do not, they are earmarked and slaughtered if you wish, and you receive compensation. Or, they may go into the Bang herd.

Q. Supposing some pass this second test and some do not?

Interval between tests.

A. Then the reactors are taken out as usual, and the others quarantined again for sixty days, and so on. But all animals added to your herd must pass two successive clean tests.

Q. Are all retests made at sixty-day intervals?

Purchase from herds accredited or in process.

A. No! It is not advisable that cattle should be tested very frequently within a short period. Retests will be made according to instruction from the Veterinary Director General.

Q. Supposing I wish to buy cattle from an accredited herd, or one that is being tested for accreditation, what then?

A. If your herd is fully accredited you can buy from another fully accredited herd, and the cattle may come directly into your herd without any test. You will have to notify your district inspector as to where you are going to buy, and he can find out if the owner has a fully accredited herd.

Q. And if neither herd is accredited?

A. If both herds have passed two clean tests, you can buy and take the animals straight into your herd without test subject to the approval of your district inspector. If the herd you buy from is further advanced towards accreditation than yours, you

can take the cattle straight in as long as your own herd has passed two clean tests. But always let the district inspector know. He will tell you what to do.

Q. What kind of a test do the inspectors use?

A. There are three varieties of test used on this work. Which test will be used at any time must be left to the judgment of the inspector.

Q. What about the man with six or eight head of cattle?

A. He cannot get on the list alone. But if two men are owners of herds which together come up to the minimum number required, and if their farms are close enough to each other so that an inspector can make one visit to test them both at once, they can make a joint application.

"Joint herds."

Q. Supposing then that one of these owners has a reactor and the other does not?

A. Then one herd must wait for the other since their herds are considered as one herd.

Q. And if their herds increase to a point at which each has over the minimum number, what then?

A. They could then apply to split the herd into separate ownerships. They would have to sign single ownership application forms.

"Valuable reacting bull."

Q. And would each herd retain the standing of the original joint herd?

A. Yes.

Q. It would be tough to have to slaughter a good bull if I had not a Bang herd, and did not want to start one!

A. You do not have to slaughter him. You can isolate him in permanent quarantine on your own farm. You can then use him for breeding under special conditions.

Q. What are they?

A. You must not bring the cow into his quarters, or take the bull into the herd premises. The breeding must be on "neutral" ground. During service the animals must be controlled by rope or staff, and immediately after each must be returned to its own quarters.

Q. Supposing I wanted to slaughter this bull, would I get compensation?

A. That depends! If you kept him for breeding until he was worn out and then asked for compensation on slaughter, you would not get it. But, if after keeping him a little while, you decided it was unsafe, or that you didn't like the idea of having a diseased animal around, and slaughtered him because you wanted sincerely to eradicate tuberculosis, your application for compensation would probably be favourably considered.

Authority.

Q. Supposing my first test shows that all my cattle are diseased, and they are all slaughtered, what then?

A. In that case you would clean up, disinfect your premises and start again helped by the compensation money.

Q. What authority is behind the Accredited Herd Plan?

A. The Dominion Government working through its Department of Agriculture under the Order in Council, dated April 16, 1917.

Q. What is the most important part of the plan?

A. Your co-operation. Inspectors do their best and their work is carefully supervised, but that isn't worth anything unless you get right in to help. You can do that by following the regulations strictly.

Municipal
Tuberculosis
Order.

Q. That's all on accredited herd testing, what about municipal testing?

A. One difference in this system is that action starts with the municipality; under the accredited herd plan, the herd owner takes the initiative personally.

Authority.

Q. Supposing a municipality wants to come in under the Municipal Tuberculosis Order, how does it start.

A. The municipality must have power to pass a by-law putting the Municipal Tuberculosis Order into force.

Q. How does it get the necessary power.

A. It can receive authority from the provincial government, usually through the Department of Municipal Affairs.

Q. And then?

A. It should pass a by-law embodying the main provisions of the Municipal Tuberculosis Order especially those dealing with the test, and disposal of reactors.

Classification
of dairies.

Q. Who looks after the working of the order for the municipality?

A. The Medical Health Officer, and, if necessary, under him a paid sanitary inspector. He decides the question of classification of dairies.

Q. What classification is possible?

A. Into two classes. Class A dairies are those which may sell milk or cream in a raw state; Class B dairies can only sell pasteurized milk or cream.

Pasteurization.

Q. Do all municipalities have dairies in both classes?

A. Not necessarily. It depends upon the decision of the Medical Health Officer.

Q. What is pasteurization?

A. It is a process needing special apparatus which under the Municipal Tuberculosis Order must satisfy the Medical Health Officer's requirements. Its purpose is to render milk harmless for use as food.

Q. What is the process?

A. It consists of raising the temperature of milk to 145° Fahrenheit for twenty minutes. Then the milk is rapidly cooled.

Q. The by-law is passed, and the classification made, what comes next?

A. The by-law should be submitted to the Veterinary Director General for his approval. With it the Medical Health Officer says what he wishes as to classification.

Reactors.

Q. If the by-law is approved, what then?

A. A regular salaried inspector of the Health of Animals Branch will make a preliminary survey of the dairies which the Medical Health Officer's list shows as being Class "A."

Q. Supposing reactors are found by the test?

A. They will be T marked and must be slaughtered if the owner wishes to stay in class "A." If he keeps them he will be transferred to Class "B."

Q. Must the reactors be slaughtered at once?

A. Only if in the opinion of the inspector the case is so bad that it would be dangerous to keep them. Otherwise the animals may be isolated and fitted for the block if he wishes.

Q. What is the next step?

A. If reports on the Class "A" dairies are satisfactory testing can begin. If not, testing will be delayed until structural or sanitary requirements have been satisfied.

Additions by
purchase.

Q. What kind of test will be used?

A. That is left to the judgment of the inspector.

Q. How can additions be made to these herds?

A. The district inspector should be notified and he will arrange to test animals on the vendor's premises, or in isolation on the buyer's premises. If the cattle pass the test, they can enter directly into the herd. If they are bought "subject to test" reactors will be T marked and removed and no further action taken.

Q. Is the same compensation paid for cases of open tuberculosis.

A. No! If destroyed as being an open case, only half of the appraised value will be paid.

Q. Is there any other way I can have my cattle tested? Supposing I have a herd of grades outside a municipal area.

'Supervised' Plan.

A. Then you can have the test made under the Supervised Plan.

Q. How is that carried on?

A. An owner undertakes in his form of application, which he gets from the Veterinary Director General, to conform to the regulations dealing with this system. These are that you will obey the inspector's instructions as to quarantining, testing and retesting, buying, selling, handling of products, sanitation of buildings and avoiding of contact between his own and other animals.

Q. Does it cost anything?

A. The test is applied free of charge. The owner agrees to furnish transportation for the inspector to and from the nearest station and to give board and lodging to him during the test.

Q. Is compensation paid for reactors?

A. No.

Q. What becomes of them?

Reactors.

A. They are T marked in the ear, and isolated from the healthy herd or removed from the farm altogether. If they are sold the owner should notify the Veterinary Director General.

Q. What about additions?

A. Notice is given to the district inspector of intention to purchase and the animals will be tested either on the vendor's premises, or in isolation on the purchaser's place.

Q. Is there any other system of testing officially recognized?

Test by private
practitioner with
Departmental
Tuberculin.

A. Yes! You can write to the Veterinary Director General, and name the veterinarian you intend to employ, and to state the number of animals you wish to test. Then the Department of Agriculture will supply him with its own tuberculin.

Q. Who pays him?

A. The owner of the cattle, who also undertakes to keep reactors until an inspector can come and T mark them.

Q. What happens to the reactors then?

A. It is up to the owner, as the Government pays no compensation.

Q. Can I sell reactors?

A. In Canada, yes, as long as you comply with provincial regulations, but they cannot be exported to the United States.

Q. In this case the veterinarian is not a Government inspector?

A. No, he is supplied with tuberculin and undertakes to furnish to the Veterinary Director General a record of his test on forms supplied by the Department of Agriculture.

Q. Is there any other system of testing?

A. Not officially recognized. You can have your own veterinarian test your cattle with purchased tuberculin, of course, but the Department of Agriculture does not concern itself with that.

Q. Are other varieties of farm stock affected by tuberculosis? Pigs for instance?

A. Yes it is quite common among pigs.

Q. Why is that? How do they become infected?

A. One reason is that dairy farming is increasing. Dairy products are used for feeding hogs. From tubercular cows infection gets to the pigs in milk, which has been contaminated by feces, or in other ways, or directly if the milk carries tubercular bacilli, when it leaves the cow.

Q. Is it the same disease as in cattle.

A. Yes, for all practical purposes.

Q. What conditions allow it to spread among pigs?

A. The same as in cattle. Dirt, bad ventilation, unthrifty condition. Stunted rickety pigs are more likely to become affected than well-grown, healthy ones.

Q. What are the symptoms in pigs?

A. It is not often that symptoms are found during the life of a pig, because ordinarily that is short. But in severe cases among young pigs you may find emaciation, weakness, unthrifty appearance, and a cough. In older animals than, say, two or three months, the disease generally takes a chronic form.

Q. How can the disease be prevented among pigs?

A. It cannot be entirely until it is eradicated from dairy herds. It can be lessened by pasteurization of milk from suspected cows. Thorough cooking of garbage would help too. Cleanliness, ventilation, light, are all enemies of tuberculosis.

Q. What about chickens? Do they take it?

A. Very easily. They too get it in food, if this has been contaminated by the droppings from infected cows.

Q. How can you tell if chickens are infected?

A. It is difficult to be certain without a microscope. But the general tuberculosis symptoms do occur—diarrhoea, weakness, loss of appetite and weight. Then there are some special symptoms which are sometimes seen. The disease known as “bumble foot” is one. In this the foot swells up, and cracks may form in it, which give out a discharge like matter. Lameness of the joints is another symptom, and sometimes there is a patchy appearance around the wattles and comb. The condition known among poultry men as “going light” is another indication of tuberculosis.

Q. What can be done for poultry when they are known to have tuberculosis?

A. Nothing, and it would not be worth it anyway. Kill the infected fowls and burn the bodies. Disinfect the houses and runs thoroughly. Scrape the surface soil from the runs and work in quicklime, or soak thoroughly with strong disinfectant solution.

Q. Can the disease be prevented among poultry?

A. You can do a great deal. Keep the pens and runs thoroughly and always clean, and the houses well ventilated and lighted. Use plenty of disinfectant in the runs and on dropping-boards. Watch for any sign of infection and pick out suspicious cases immediately.

